AMENDMENT TO THE CLAIMS:

1. (Currently Amended) A method for facilitating the delivery of a desired molecule into a target tissue eomprising consisting essentially of the steps of:

introducing a molecule into a target tissue comprising a cell; and

applying an electric field to the target tissue, the application of the electric field consisting of a single continuous low-level electric field applied for a duration of 100ms to 20 minutes; and to effect

effecting a change in porosity of the cell of the target tissue in response to the application of the electric field, the change in porosity sufficient to facilitate entry of a desired molecule into an interior of the cell.

- 2. (Previously Presented) The method recited in Claim 1, wherein the duration of the applying step is in a range of 100ms to 100 sec.
- 3. (Cancelled)
- 4. (Original) The method recited in Claim 1, wherein the low-level electric field has a field strength comprising 200V/cm or less.
- 5. (Cancelled)
- 6. (Original) The method recited in Claim 1, wherein the electric field comprises a pulse selected from a group of waveforms consisting of square, rectangular, exponentially decaying, exponentially increasing, bipolar, and sinusoidal; waveforms having a nongeometrically characterizable shape; waveforms characterizable by a mathematical function; waveforms characterizable by a mathematical approximation; waveforms with at least one of an AC or a DC offset signal; and waveforms without an AC or a DC offset signal.
- 7. (Cancelled)
- 8. (Original) The method recited in Claim 1, wherein the introducing step comprises the step selected from a group consisting of syringe injection, jet injection, oral dosing, transdermal delivery, infusion into tissue, and infusion into a blood vessel.

9. (Cancelled)

10. (Original) The method recited in Claim 1, wherein the target tissue is selected from a group consisting of skin, tumor, muscle, blood, blood vessel, brain, lymph, liver, pancreas, bone, colon, cardiac, lung, breast, testes, comea, prostate, and intestine.

Claims 11-20 (Cancelled)

21. (Previously Presented) A method for facilitating the delivery of a desired molecule into a target tissue comprising the steps of:

introducing a molecule into a target tissue comprising a cell; and

applying a continuous low-level electric field to the target tissue for a duration of 200ms to 20 minutes to effect a change in porosity of the cell of the target tissue sufficient to facilitate entry of a desired molecule into an interior of the cell.

- 22. (Previously Presented) The method recited in Claim 21, wherein the duration of the applying step is in a range of 200ms to 100 sec.
- 23. (Previously Presented) The method recited in Claim 21, wherein the low-level electric field has a field strength comprising 200V/cm or less.
- 24. (Previously Presented) The method recited in Claim 21, wherein the applying step comprises applying a plurality of substantially continuous low-level electric pulses to the target tissue, wherein the duration of each substantially continuous low-level electric field is sufficient to effect a change is porosity of the cell of the target tissue sufficient to facilitate entry of a desired molecule into an interior of the cell.
- 25. (Previously Presented) The method recited in Claim 21, wherein the electric field comprises a pulse selected from a group of waveforms consisting of square, rectangular, exponentially decaying, exponentially increasing, bipolar, and sinusoidal; waveforms having a nongeometrically characterizable shape; waveforms characterizable by a mathematical function; waveforms characterizable by a mathematical approximation; waveforms with at least one of an AC or a DC offset signal; and waveforms without an AC or a DC offset signal.

- 26. (Previously Presented) The method recited in Claim 25, wherein the electric field comprises a pulse comprising a combination of at least two of the pulses selected from the group of waveforms.
- 27. (Previously Presented) The method recited in Claim 21, wherein the introducing step comprises the step selected from a group consisting of syringe injection, jet injection, oral dosing, transdermal delivery, infusion into tissue, and infusion into a blood vessel.
- 28. (Previously Presented) The method recited in Claim 21, wherein the target tissue is selected from a group consisting of skin, tumor, muscle, blood, blood vessel, brain, lymph, liver, pancreas, bone, colon, cardiac, lung, breast, testes, cornea, prostate, and intestine.
- 29. (Previously Presented) A system for facilitating the delivery of a desired molecule into a target tissue comprising:
- a molecule introducer adapted to introduce a molecule into a target tissue comprising a cell; and

an applicator for applying a continuous low-level electric field to the target tissue for a duration of 200ms to 20 minutes to effect a change in porosity of the cell of the target tissue sufficient to facilitate an entry of a desired molecule into the interior of the cell.

- 30. (Currently Amended) The system recited in Claim 29, wherein the applicator applies the electric field for a duration of 100ms 200ms to 100 sec.
- 31. (Previously Presented) The system recited in Claim 29, wherein the low-level electric field has a field strength comprising 200V/cm or less.
- 32. (Previously Presented) The system recited in Claim 29, wherein the applicator applies the low-level electric field in a series of electric pulses.
- 33. (Previously Presented) The system recited in Claim 29, wherein the electric field comprises a pulse selected from a group consisting of square, rectangular, exponentially decaying, exponentially increasing, bipolar, and sinusoidal; waveforms